HP StorageWorks P4000 SAN Solution Quick Start Guide

Step 1 Setting up the storage system

1. Install the storage system into a rack, if necessary.
   We recommend using the provided rail kit for installing the storage system in a rack.

   Safety information

   Due to the weight of the storage system, use two people to lift it into a rack.

2. Connect a keyboard and monitor (KVM). You will use this connection to assign a hostname and IP address to the storage system.

   (Optional) Connect a PC or laptop to the storage system's serial port using a null modem cable. On the PC or laptop attached to the storage system, open a session with a terminal emulation program, using the following settings:

   19200, 8-N-1

3. Make certain that all the drives are seated and latched.
4. Connect the power cord(s) to the storage system and plug into the power source(s).

   Warning
   Use only the power cord(s) supplied with the storage system. Other power cords may not fit correctly and may cause problems maintaining power to the storage system.

5. Power on the storage system.

or

Step 1 Setting up the virtual SAN appliance

Insert the HP StorageWorks P4000 VSA CD in the CD drive. The installer should launch automatically.

Installing the P4000 VSA for ESX:

1. Select Install VSA for ESX
2. Unzip to the prepared directory and start the VI Client.
3. Transfer the virtual machine to the ESX server.
4. Add the VSA to inventory.
5. Select the network.
6. Configure the data disk.
   - Virtual device node must be SCSI (1:0)
   - Mode must be Independent > Persistent
7. Reserve at least 2000 MHz CPU and 1024 MB memory.
8. Power on the VSA.
9. Set the IP address and host name of the VSA
10. Repeat for each VSA

Installing the P4000 VSA for Hyper-V:

1. Select Install VSA for Hyper-V
2. After installation is complete continue with step 3: Setting up the SAN.

Step 2 Setting up the network

Prerequisites

Before configuring the network settings on individual storage nodes, have the following information ready:

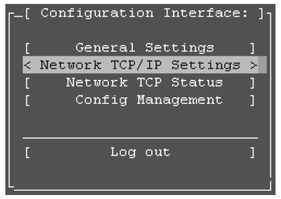
- Host names
- IP addresses, subnet mask and gateway.

1. **Logging into the configuration interface**

   Press enter to log in. Use the tab key to move through the fields and menu options in the configuration interface.

2. **Configuration interface main menu**

   Tab to network TCP/IP settings and press enter.



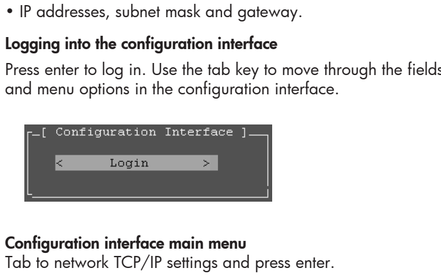
3. **Selecting an interface to configure**

   Tab to select the network interface that you want to configure (eth0 or port1) and press enter.

4. **Change the host name and set IP address**

   Set the IP address, subnet mask and gateway.

   Best practice
   Manually assign IP addresses to the storage nodes. Using DHCP to obtain an IP address is not recommended unless using reserved addresses.


[Network Settings:]
Specify the network settings for the Broadcom Corporation NetXtreme BCM5714 Gigabit Ethernet port. Be sure the ethernet cable is plugged into the selected
Hostname: Boulder-1
( ) Disable Interface.
( ) Obtain IP address automatically using DHCP.
(*) Use the following IP address:
IP Address: 10.0.16.46
Mask: 255.255.0.0
Gateway: 10.0.255.254
[OK] [CANCEL]

5. **Verify IP address**

   Ping the IP address of the storage node from another host on the network to verify that it is operating correctly.

6. Repeat for each storage node.

Step 3 Setting up the SAN

Using the HP StorageWorks Management DVD:

Insert the HP StorageWorks Management DVD in the DVD drive. The installer should launch automatically.

1. **Installing the centralized management console (CMC)**

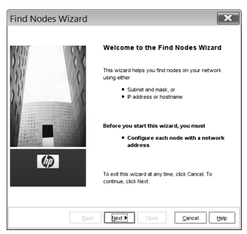
   Install the CMC on the computer that you will use to administer the SAN. You need administrative privileges while installing the CMC.
   Using the installation wizard:
   1. Click centralized management console.
   2. Click Install CMC.
   3. Continue through the installation wizard, following the instructions on each window.

2. **Install the Failover Manager**

   Install the Failover Manager onto a separate server on the network.
   Caution: Do not install the Failover Manager on the HP LeftHand Storage Solution, since this would defeat the purpose of the Failover Manager.
   Using the installation wizard:
   1. Click Failover Manager.
   2. Click Install FOM.
   3. Continue through the installation wizard, following the instructions on each window.
      After the installation wizard finishes, the default choice is to launch the Failover Manager.
   4. Click Finish to exit the wizard and start the Failover Manager.

3. **Discover nodes on the network**

   Use the Find Nodes wizard to discover the storage nodes on the network, using either IP addresses or host names, or by using the subnet and gateway mask of the storage network.


Find Nodes Wizard
Welcome to the Find Nodes Wizard
This wizard helps you find nodes on your network using either
Subnet and mask, or
IP address or hostname
Before you start this wizard, you must
Configure each node with a network address
To exit this wizard at any time, click Cancel. To continue, click Next.
Back
Next
Close
Cancel
Help

Find Nodes Wizard
Search for nodes either globally or individually.
Select subnet and mask, or IP address or hostname
How would you like to search for your nodes?
By Subnet and Mask (global broadcast)
By IP address or Hostname (individual search)
To continue, click Next.
Back
Next
Close
Cancel
Help

   The found storage nodes appear in the available category in the CMC.

4. **Verify or configure RAID. Configure network settings**

   Verify the RAID configuration on your storage nodes before creating storage. You can only reconfigure RAID on storage nodes that are in the available pool. Change network settings, including bonding NICs, before creating storage.

5. **Setting up SAN storage**

   Use the management groups, clusters and volumes wizard to set up the storage configuration and create a storage volume.
   - Using a 2-node or multi-site SAN configuration
     You may need to install the failover manager that runs on VMware for automated failover configurations or multi-site SANs.

Management Groups, Clusters, and Volumes Wiz...
Welcome to the Management Groups, Clusters, and Volumes Wizard
This wizard helps you:
Create a management group, cluster, and volume for the first time, or
Convert a standard cluster to a Multi-Site cluster, or
Add another volume to an existing cluster
Before you start this wizard, you must:
Know what information you should have available
Discover your nodes on the network, (e.g., via the Find Nodes Wizard)
To exit this wizard at any time, click Cancel. To continue, click Next.
Back
Next
Close
Cancel
Help

6. **Download and install iSCSI initiator(s)**

   Install the appropriate iSCSI initiator on your application servers.

7. **Enable access to volumes**

Assign Volume and Snapshot Wizard
Welcome to the Assign Volume and Snapshot Wizard
This wizard helps you:
Configure volume and snapshot access privileges using a server
Before you start this wizard, you must:
Create a volume or snapshot
To exit this wizard at any time, click Cancel. To continue, click Next.
Back
Next
Close
Cancel
Help

8. **Log in to volumes via iSCSI initiator(s)**

   Configure the initiator(s) to …
   - Connect to the cluster VIP
   - Discover the targets
   - Log on
   - Format the disks with a file system.

9. **Install and set up service console**

   Install service console from the HP StorageWorks Management DVD. Configure the service console to automatically upload SAN health information to HP StorageWorks technical support.

Documentation Available

For detailed instructions about using the HP StorageWorks P4000 SAN Solution, see the following resources.

- **Online Help**
  Click Help > Help Topics from the menu bar to open the Online Help. Context sensitive help is available by clicking the question mark on any window.
- **HP StorageWorks P4000 SAN Solution User Manual**
  Find complete instructions for configuring and managing storage nodes and clustered storage volumes in the User Manual. The User Manual is available in PDF format, installed in the same directory as the Centralized Management Console program files.
- **HP StorageWorks P4000 VSA Quick Start Guide**
  Find detailed instructions for planning and installing the VSA and getting started with the Centralized Management Console.
- **HP StorageWorks P4000 VSA User Manual**
  Find detailed instructions for designing your virtual SAN, including hardware design and virtual network design. Also includes important information about using VSAs in the HP StorageWorks P4000 SAN Solution, including sample configurations.
- **Release Notes**
  Review the Release Notes and Service Notes for the latest information about the product.

These documents can be found at the HP support website at: http://www.hp.com/support/manuals after selecting your product model.

Support Contacts

Telephone numbers for worldwide technical support are listed on the HP support website: http://www.hp.com/support

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